



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/286,027	04/05/1999	LUKAS LEYTEN	PHN16819	4425

24737 7590 04/14/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
----------

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 04/14/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/286,027

Applicant(s)

LEYTEN ET AL.

Examiner

SIMON D NGUYEN

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/27/04.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 12-13, 16-17, 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Luxon et al. (6,095,820).

Regarding claim 1, Luxon discloses a portable communication device (figs. 22, 54, 59, 61) comprising an antenna configuration connected to a control device for forming a plurality of different antenna directivity configurations (figs. 22-26, 30-31, 55-56, column 42 lines 20-58), characterized in that the control device (# 638 of fig.55) comprises a detector (column 41 line 62) for discriminating between a transmitting state and a receiving state, wherein at this position the device still receive an incoming signal of the communication device for as based on such states effecting various non-uniform selection patterns among the plurality (figs.22-26, 30-31, 55-56, column 38 lines 21-58, column 40 line 62 to column 42 line 58).

Art Unit: 2685

Regarding claim 16, this claim is rejected for the same reason as set forth in claim 1, wherein when the device is adjacent to the user's ear, the radiation is mostly directed away from the user's body (figs.21-22).

Regarding claims 2-3, Luxon further discloses one or more directivity configurations are excluded from a particular selection pattern (column 32 lines 5-11, fig. 48) and having non-uniform preferences in respective selection patterns (column 32 lines 12-49, figs. 23-26).

Regarding claim 4, Luxon further discloses the antenna patterns are subjected to change by the user (column 24 lines 35-40).

Regarding claim 5, Luxon further discloses in the transmitting state disfavors one or more directivity configuration that would expectably cause a relatively strong filed absorbance in nearby physical matter (column 6 line 40 to column 8 line 21, column 14 lines 50-67, column 19 line 50 to column 20 line 65, column 31 line 33 to column 32 line 11).

Regarding claim 6, Luxon further discloses the controller is exclusively operational during an actual communication session (column 41 line 55 to column 42 line 58).

Regarding claim 12, Luxon further discloses the communication device is a mobile phone (fig.16).

Regarding claim 13, Luxon further discloses the patterns affected are designed to minimize radiation directed toward the head of a user (column 20 line 56 to column 21 line 39).

Regarding claim 17, Luxon further discloses the step of detecting a direction of a reception field (figs.31a-b, column 41 line 62, column 31 lines 40-67).

Regarding claim 19-20, Luxon further disclose the step of automatically adjusting the selected configuration (column 6 line 20, column 32 lines 1-11, column 40 line 61).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxon et al. (6,095,820) in view of Gratias (5,826,201).

Regarding claim 14, Luxon does not specifically disclose the patterns comprising lobes.

Gratias discloses method and apparatus for shielding and redirecting radiation from a portable communication device having multi directional patterns/configurations (abstract), wherein the patterns comprises first and second lobes in order the majority of the volume covered by the lobes does not intersect a user's head (fig.3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Luxon, modified by Gratias to reduce the radiation directed toward the head of a user in order to prevent the affection of the radio frequency radiation emanating from the antenna.

5. Claims 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxon et al. (6,095,820) in view of Martin et al. (5,983,119).

Regarding claim 18, Luxon does not specifically disclose an indication.

Martin discloses an antenna system having an indication for the user to select configuration (column 5 line 20-33). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Luxon, modified by Martin to select the best direction for the antenna to receive/transmit signals in order to improve the system performance.

6. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxon et al. (6,095,820) in view of Kurby et al. (5,559,806) and Bradley et al. (5,864,316).

Regarding claims 7-11, Luxon discloses determining means coupled to the controlling means for determining the antenna position when the antenna transmits/receives signals (column 41 lines 55-67). It is noted that the determining means as described having a same function as measuring means. However, Luxon does not specifically disclose measuring means and an indication means.

Kurby discloses signal measurement circuit 670 (fig.5) for measuring an apparent origin direction of a reception field and actual reception signal strength for conversion into a parameter whose indicated value varies with a deviation from an optimum

orientation (column 5 lines 32-67, column 6). However, Luxon and Kurby fail to disclose indicator means for presenting a user indication.

Bradley discloses alarm device 408 (figs.6, 12) as indicator means for presenting a user indication by either through visual alarm device 920 or audio alarm device 922 (column 6 lines 1-26, column 8 lines 45-67) and a processor 500 in combination with a detector 406 provide position/ bearing /attitude of the portable phone by sending appropriate parameters to the antenna (columns 9-10 lines 46-67, 1-17). It would have been obvious to one skilled in the art at the time the invention was made to have a measuring means as taught by Kurby and an indicator means of Bradley in the communication device of Luxon in order to instruct the user to either change the position of the portable phone or informing the user that an object is about to interfere with the antenna beam and cause of loss of the communication in an original direction.

### ***Allowable Subject Matter***

7. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 15, the Basille reference (5,099,247) discloses an antenna pattern having first and second lobes (fig.1b). However, the prior art of record fails to disclose an antenna pattern having first and second lobes wherein the lobes define an axis that is parallel to a direction the user is looking, the first lobe being on a side facing the direction and the second lobe being on an opposite side, wherein the first lobe being

Art Unit: 2685

smaller than the second lobe, a gap between the lobes substantially coinciding with the user's ear.

***Response to Arguments***

8. Applicant's arguments filed 1/30/04 have been fully considered but they are not persuasive.

Responsive to arguments in Remarks,

Responsive to claims 1 and 16, the applicant argued that the prior art fails to teach or disclose the control unit comprises a detector for discriminating between transmitting and receiving states.

Reviewing the prior art of record, the examiner disagrees because: Firstly, Luxon discloses that the controlling means 638 controls the antenna unit, wherein the antenna having a detection circuit for detecting when the antenna unit is in a deployed position (transmitting radio signal), at this position the controlling means controls a signal generating circuit to generate a higher signal power transmittable, and when the antenna unit is in the stowed position (receiving radio signal), the controlling means controls the signal generating unit to generate a lower signal power transmittable (column 40 line 62 to column 42 line 5) wherein in the stowed position, the antenna unit is unable to transmit radiation but still receive an incoming radio signal because the driven antenna member does not transmit so as to protect the user from radiation emitted (column 38 lines 34-57) and wherein at the deployed position, the controlling means controls the driven antenna member 606 to extend away from the shielding



Art Unit: 2685

member and the orientation of the driven antenna member and the radiation reflector in order the radiation reflected by the radiation reflector is directed away from the user, as the result, limiting the transmission of radiation transmission of the radio signal (column 38 lines 21-58, column 42 lines 21-58).

Secondly, the terms "stowed and deployed position" used to explain how the controlling means having a detecting circuit controls the antenna when the phone in a transmission state differently controlling when the phone in a reception state in order to prevent unwanted exposure of the user to potentially harmful radiation.

Responsive to claim 6, Luxon discloses that the controlling means is provided for controlling the transmission of radio signal so that when the antenna unit is in the closed or stowed position, it is unable to transmit radiation but still be available for receiving an incoming radio signal and the controlling means is provided for limiting the transmitting of radiation from the driven antenna member to only times when the antenna unit is disposed so that the radio signal is directed away from the user in the deployed position (transmitting position) (column 41 line 55 to column 42 line 58) which means the controlling means in Luxon is exclusively operational during an actual communication session.

Responsive to claim 14, In Remarks, the applicant argued that Gratias teaches a single lobe having contour of equal field intensity, rather than two distinct lobes.

Review the prior art of Gratias, Gratias discloses the shield having a plurality of circular contours (lobes). Since each contour is a lobe, there are three lobes in fig.3 (column 4 lines 4-14). In the argument, the applicant stated that the first and second

Art Unit: 2685

lobes are distinct lobes, however, the applicant did not claim such thing and not defined in the claim for those skilled in the art to understand. Therefore, the rejection is stand.

Responsive to claim 17, Luxon discloses a radiation control means having a directing means for rejecting signals from unwanted directions and directing signals toward the transmission side in order to control the radiation pattern of the radio signal transmitted from the antenna (column 31 lines 40-67). It should be noted that the term "the reception field" is not a technical term, therefore, the term should be defined right in the claim those skilled in the art to understand since the reception field claimed by the application can be understand as detecting the direction of signal received from a remote transmitter.

Responsive to claim 19, Luxon discloses a pivoting joint supporting the antenna for adjusting the direction of the radio signal transmitted from the antenna, wherein the antenna moves into a selected position in order to direct the radio signal emitted from the antenna in a particularly advantageous direction (column 32 lines 1-11).

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2685

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

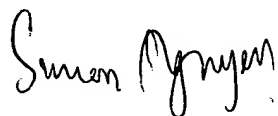
Hand-delivered response should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Application/Control Number: 09/286,027  
Art Unit: 2685

Page 11

Simon Nguyen

April 8, 2004

A handwritten signature in cursive script that reads "Simon Nguyen".